Moreton Bay
Regional Council

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Mr Andrew McGowan
Inquiry Secretary
Standing Committee on Infrastructure &
Communications
P O Box 6021
Parliament House
CANBERRA ACT 2600

Dear Mr McGowan

NEW INQUIRY INTO THE NATIONAL BROADBAND NETWORK

I refer to correspondence dated 9 December 2010, addressed to the Mayor – Cr Allan Sutherland, inviting submissions to the above inquiry.

On behalf of Moreton Bay Regional Council, I would like to thank the House of Representatives Standing Committee on Infrastructure & Communications for the opportunity to comment on the capacity of the National Broadband Network to support economic development, environmental sustainability, and community wellbeing initiatives throughout the region.

Council's submission has been prepared in conjunction with a submission from Regional Development Australia Moreton Bay Inc. Both of these documents are enclosed.

I wish the Standing Committee well and Council looks forward to reviewing the findings from the inquiry.

Yours sincerely

John Rauber
Chief Executive Officer

Enc   2 Submissions:
       Moreton Bay Regional Council and Regional Development Australia Moreton Bay Inc.

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Moreton Bay Regional Council – Submission

New Inquiry into the National Broadband Network (NBN)

a) the delivery of government services and programs

In March 2008, Moreton Bay Regional Council (MBRC) was formed through the amalgamation of the Caboolture, Pine Rivers and Redcliffe Local Government Areas (LGAs) north of Brisbane. The MBRC area encompasses over 2,000 square kilometres and in 2009 the estimated resident population was 371,162. MBRC is now the third largest local government in Australia by population and is located in one of the fastest growing areas in Australia.

Given Council's large geographical area and population, the NBN has the potential to improve access to Council information. From the convenience of their own home, residents are able to access Council information online. Given that 62.6% of households in MBRC have an internet connection and this percentage is rapidly increasing, the NBN will enable a greater number of residents to access information through the internet. Furthermore, the internet is a cost effective method for Council to provide up-to-date information in a relevant and timely manner.

Broadband also has the potential to generate improved efficiencies for many of Council's transactional services such as payment of Council rates and charges, development services, and applying for Council permits and grants. In many instances, this will reduce the need for residents or other stakeholders to visit Council's customer service centres to do business with Council.

Broadband also has the potential to improve the delivery of many other Council services such as:

- Public health services, libraries and community development;
- Waste management;
- Coastal management and monitoring of catchments and waterways;
- Community infrastructure such as swimming pools, community halls, parks and recreational facilities;
- Regional growth and strategic planning; and
- Economic development strategies to increase local job opportunities.

Many of these services already have a presence on the internet that could be enhanced through faster and more reliable broadband services.

For example, broadband services have the potential to improve the support provided to local businesses via webinars and online business resources, reliable connectivity for interactive two-way conferencing and investment attraction tours. In a recent survey conducted by Council, 58% of business respondents indicated that broadband had improved their business practices and 36% indicated that broadband had a large impact on their business.

Accessing Council services and information using broadband technology has additional benefits including:

- Opportunities to improve participation in community consultation activities utilising online community engagement techniques;
- Opportunities to communicate timely and relevant information in emergency situations; and
- Reduced paper use.

b) achieving health outcomes

Over the next 10 years, the population of Moreton Bay region will increase by approximately 25% from 371,162 to an estimated 464,155 by 2021. As the population of the region grows and becomes increasingly urbanised, it is likely that demand for health services will increase.

Furthermore, it is forecasted that the demographic trend of the region may also affect the demand on health related matters due to the change in age structure. The proportion of the population over the age of 65 will increase from 11% to 25% as summarised in the table below.

Table 1 Source: OESR (2010), Population and Housing Profile - Moreton Bay Regional Council

Year	Age Group (Percentage of Total Population)					Median Age
	0-14	15-24	25-44	45-64	65+	
2006	22.2%	13.1%	27.8%	25.2%	11.7%	36
2031	17.1%	11.1%	23.2%	23.0%	25.6%	44

Currently there are two public hospitals, three private hospitals and two day hospitals operating in the Moreton Bay region. The table below shows the locations of these hospitals.

Public Hospitals	Private Hospitals	Day Hospitals
Caboolture Hospital (McKean Street, Caboolture)	Caboolture Private Hospital (Caboolture)	Northside Endoscopy Service (Caboolture)
Redcliffe Hospital (Anzac Avenue, Redcliffe)	Peninsula Private Hospital (Kippa-Ring)	Peninsula Eye Hospital (Redcliffe)
	Pine Rivers Private Hospital (Strathpine)	

The Moreton Bay region has over twenty aged care service centres operating throughout the region, mostly in the Redcliffe and Caboolture areas.

Broadband would assist in meeting this anticipated increased demand for health services by providing doctors and patients with the following services online:

- *Secure environment*: Technology allows doctors and patients to interact in a secure and comfortable environment to discuss sensitive issues.
- *Flexibility*: Doctors can answer routine and less critical queries at a convenient time.
- *Cost and time-saving*: Doctors can follow-up, provide advice, and re-direct patients to resources on the internet. This saves cost and time by reducing office visits.
- *Vulnerable population*: Technology aids the very young, elderly, and patients with complex birth defects, chronic illnesses, and disabled children by alleviating their problems so that they can continue living in their homes.
- *Responsive service delivery*: Targeted treatment and patient management enabled by online collaboration between health professionals and the instant transmission of diagnostic images, such as x-rays.
- *Home based monitoring*: Allows people to stay in their homes for longer by introducing home-based monitoring by healthcare professionals. This will reduce hospitalisation rates and delay the need for people to go into residential aged care.

It is estimated that the ongoing benefits to Australia from wide-scale adoption of telehealth services are between $2 billion and $4 billion per year (Access Economics).

c) improving the educational resources and training available for teachers and students

Currently in the region there are 63 government schools and 30 non-government schools servicing the resident youth population for primary and secondary educational needs. The region also provides higher education at the following facilities:

- Brisbane North Institute of TAFE (Caboolture campus).
- Trade College (Redcliffe campus).
- QUT University (Caboolture Campus).

Availability of fast, reliable broadband to all education institutions and the homes of students will enhance student's access information, and their capacity to collaborate and communicate with other students.

Distance will no longer be a barrier for some students in accessing the best specialist teachers in Australia. Students will be able to join virtual classrooms and learn with other students located across the country. Broadband will also provide improved opportunities for collaborative learning between education institutions, both domestically and internationally.

Technological advancements in the field of education are fast evolving. Today, e-learning allows for a personalised learning experience where learners are able to take control and manage their own learning at their own pace. The learner sets their own goals, manages the process and content of learning, and communicates effectively with their peers.

Broadband allows students, no matter where they live, to access education and research with educational material being transmitted in real time. Opportunities for entirely new teaching methods will evolve, including the ability to choose courses from any learning institution.

As the population of the Moreton Bay Region grows and becomes increasingly urbanised, it is likely that demand for education and training services will increase.

The availability of fast and reliable broadband services across the region will assist in responding to this demand. Furthermore, improving access to training and education opportunities for a growing population will increase the level of skills and capabilities of residents in the region. This will assist residents in accessing employment opportunities and will result in a stronger and more knowledge driven economy over time. A highly skilled and innovative workforce can assist local companies to grow and attract new companies to the region.

d) the management of Australia's built and natural resources and environmental sustainability

Sustainability is often described in terms of protecting and enhancing the natural environment. Reducing our carbon footprint and the amount of waste going into landfill will contribute to the future sustainability of the region.

In South East Queensland, the biggest contributor of greenhouse gas emissions is listed below:

Activity	Percentage of Total Emissions
Energy used by industry	40%
Fuel consumed by road transport	22%
Energy consumed by residential users	13%
Commercial energy use	12%
Agricultural emissions	7%
Clearing woody vegetation	3%
Waste disposal and treatment	3%

The NBN has the potential to change the way people live and conduct their business through the use of digital tools to manage energy consumption. For example:

- Homes will interact with smart grid energy systems to manage overall energy consumption and demand. This will reduce peak energy consumption and generation requirements.
- High-quality, high-definition videoconferencing will reduce the need for travel as collaboration can occur online, rather than in person.
- Teleworking will reduce current and future traffic congestion, demand on road and public transport infrastructure.

In the 2006 Journey to Work data states, that 6.3% of people caught public transport as their primary mode of transport in the Moreton Bay region, compared with 85.1% who was either the driver or passenger. As mentioned above, the impact of long travel times on commuters has environmental, social and health costs associated with transport and traffic congestion.

Both now and into the future, residents are looking for effective ways to make efficient use of their time rather then spending long periods in traffic congestion. As an alternative, residents are looking towards telework to cut down travelling time. This reduces the impacts on infrastructure and greenhouse gas emissions. In a recent survey undertaken by Council, 32% of respondents used their home broadband connection for telework.

e) *impacting regional economic growth and employment opportunities*

The Moreton Bay regional economy is diverse, providing a balanced economy with strengths in a variety of sectors. These key industry sectors in the region include:

- Advanced manufacturing;
- Building products;
- Machinery and equipment, metal fabrication;
- Plastics;
- Wood & paper products (Petrie Paper Mill);
- Professional services (business services, finance and insurance);
- Education;
- Health; and
- Retail.

Broadband will also assist Council in attracting investment and promoting the region as a business destination. Opportunities for business growth in the region have been identified in the professional training sector in the fields of information technology, engineering, financial and insurance. In order to attract growth opportunities in professional services to the region, access to fast and reliable broadband would significantly influence new business investment in the region.

Council has endorsed an Economic Development Strategy for the region. A directive from this strategy focuses on workforce development to increase the level of skills and capabilities in the region. As mentioned above, a highly skilled and innovative workforce can assist local business and attract new businesses.

The long term target from Council's Economic Development Strategy is to increase the proportion of residents who work in the region to 70% by 2031. Currently 57% of residents travel outside of the region for employment.

The NBN will assist Council achieve this long term target in the following ways:

- Provide the necessary digital infrastructure for local business to grow and to attract new business to the region.
- Assist in improving access to training and education opportunities online.
- Increase opportunities for teleworking.
- Attract suitably qualified people to live in the region.

It is also important to note that the construction of the NBN will create jobs and indirectly support various local industries throughout the region.

To support the roll out of the NBN across the region, Council recently participated in the Smart Regions Broadband Project. This was an initiative of the Australian Government aimed at ensuring the region was 'broadband ready'. Key outcomes from the project were that:

- All new industrial, residential and commercial developments in the region from 1 July 2010 are required to have optical fibre to the premises.
- Council is developing infrastructure design standards to assist developers and the Council to provide this broadband infrastructure.

f) impacting business efficiencies and revenues, particularly for small and medium business, and Australia's export market

Globalisation will continue to impact on local businesses and industries by forcing them to compete directly with international markets for the sale of goods and services locally, nationally, and internationally.

To increase the competitiveness of local businesses and industries, companies will increasingly rely on technology that will make use of the NBN to remain up-to-date, sustainable and competitive. Furthermore, online based technology can also greatly assist companies grow through process improvements and systems efficiencies.

A directive from Council's Economic Development Strategy focuses on assisting existing local businesses to grow and prosper. Existing businesses are responsible for 60%-80% of private sector investment and job growth in most advanced economies. Assisting existing businesses to grow will increase local jobs, increase GRP, and promote innovation throughout the region.

By using services and applications that utilise the NBN, businesses throughout the region, regardless of their size or location, have the opportunity to improve productivity by:

- Reducing the need for a physical presence.
- Allowing access to sophisticated applications, such as real-time online tools.
- Allowing businesses to expand their markets and to compete in a national or global marketplace, with data-rich websites, showing video and high-resolution images of products and services.
- Offering more flexible work practices through greater scope for teleworking.

g) interaction with research and development and related innovation investments

Investment attraction is a key directive in Council's Economic Development Strategy in order to promote the Moreton Bay region as a business destination and to proactively recruit new business, investment and jobs. New businesses are an important source of investment in communities. Attracting new business to the area also generates employment, increases GRP, and increases the diversity of the local economy contributing new skills and potentially increasing innovation in the region.

As stated in Council's Economic Development Strategy, future growth in economic activity throughout the region should focus on knowledge driven industries that promote innovation. Such industries required highly skilled workers and the use of technology. These types of activity often contribute significant value to the economy and generally pay much higher wages, allowing residents to a comfortable lifestyle and high standard of living. Fast and reliable broadband services will be critical to support industry growth in these areas.

h) facilitating community and social benefits

Council provides libraries and other community facilities for residents to undertake a variety of life-long learning, recreation and community service activities. As the population of the region grows, there will be an increased demand for both libraries and other community facilities. In response to this anticipated growth, Council and the State Government are planning for increased demand for libraries and other community facilities.

Libraries into the future are facing major changes and new ways of thinking about how library services should be delivered. In a recent review of Council's library service it was noted that there is a world-wide trend away from small, intimate local libraries towards 'destination' libraries.

The future role for libraries in the community is based on four key themes:

- Welcoming spaces;
- Connecting people;
- Learning and leisure; and
- Embracing technology.

A new facility in Caboolture is currently under construction which will provide a library, art gallery and learning centre. This multi-function centre will provide the residents with information, tools and capabilities for social networking and a place for cultural and economic interaction with the wider community.

Council plans to have 'destination' libraries which would offer a mix of a full lending service, advisory services, wide range of programs and activities, cafes and meeting and training rooms. This would see a transformation from a basic lending and reference services to a contemporary and modern facility with flexible and efficient spaces for residents to visit. Availability of fast and reliable broadband services will need to be a central feature of these 'destination' libraries. Furthermore, broadband enabled technology through the NBN will also assist residents access library services remotely.

At a broader level, technology has become a key feature of daily life. People access the internet for shopping, banking, making travel arrangements and attending university. This technology has evolved and transformed society. Through the NBN, opportunity exists to improve the access for many people to the internet so they can enjoy the following benefits:

- Convenience: Provides a great deal of convenience in expediting personal and business transactions be it shopping, banking, or simply paying bills.
- Speed: From sending gifts to making payments, everything gets a done with a few clicks.
- Communication: The world is a smaller place and the internet allows everyone to communicate with families and friends at a more affordable cost.
- Development: Internet technology has brought about improvements in many fields such as medicine, government, business and education.

i) ***the optional capacity and technological requirements of a network to deliver these outcomes***

The rollout of the NBN provides a unique opportunity to standardise the delivery of broadband services across the country.

To support the Australian Government's target to connect 93% of Australian homes, schools and workplaces to the internet with an optical fibre connection, Council recently participated in the Smart Regions Broadband Project. This was an initiative of the Australian Government aimed at ensuring the region was 'broadband ready'. The key outcomes from the Smart Regions Broadband Project were:

▪ All new industrial, residential and commercial developments in the region from 1 July 2010 are required to have optical fibre to the premises.
▪ Council is developing infrastructure design standards to assist developers and the Council to provide this broadband infrastructure.

At a broader level, the region's anticipated high population growth is a key driver of future demand for various types of infrastructure including communications technology, transport and utilities is high population growth. By 2031, the Moreton Bay region will need to accommodate an additional 74,774 dwellings which represents a 52% increase. It is highly likely that households living in the additional dwellings will possess a computer and require internet access that is reliable and fast.

Therefore, in relation to capacity of the NBN and other types of key infrastructure, the key challenge for Council and other levels of government in the Moreton Bay region is to ensure that the planning for new housing and the provision of infrastructure is responsive to the needs of the community.

In a recent survey conducted by Council, 67% of survey respondents indicated that if they made enquiries about the property today, the availability of broadband would influence the decision to buy/rent a property. This key finding is a message that prospective buyers or renters are seeking access to high speed internet and reliable connectivity when deciding where to live/rent.

Regional Development Australia Moreton Bay Inc.

21st February, 2011.

Mr Andrew McGowan
Inquiry Secretary
Standing Committee on Infrastructure & Communications
House of Representatives
PO Box 6021
Parliament House
Canberra
ACT 2600

Dear Andrew

Re: New Enquiry into the National Broadband Network

Regional Development Australia (RDA) Moreton Bay would like to thank the Standing Committee on Infrastructure and Communications for the opportunity to present a submission in relation to the inquiry into the capacity of the National Broadband Network (NBN).

This submission is split into two sections – **General Comments** and **Specific Comments** to address the points listed in the invitation to submit a submission dated 9th December, 2010.

General Comments:

Value of the Inquiry:

During consultations in regard to this inquiry the consensus view is that the Australian Government has previously identified the benefits of the National Broadband Network and its ability to enhance communications through dramatically enhanced bandwidth. Further this was outlined in the business case behind the decision to invest $38bn to ensure the delivery of the National Broadband Network.

NBN Content in current Australian Government Strategic Documents:

The Discussion Paper – *Our Cities – A national strategy for the future of Australian Cities* produced by the Minister for Infrastructure and Transport, indicates that the roll-out of high speed broadband is expected to:

- Improve the productivity of Australian businesses, allow them to expand their customer base and grow revenues, regardless of their location
- Enhance education, health and other service delivery for all Australians regardless of location
- Connect our cities and regional centres nationally and globally
- Facilitate greater take up of teleworking, which in turn, allows workplace flexibility, eases traffic congestion and enhances regional employment opportunities
- Allows the use of smart technology to better manage our natural resources, infrastructure and issues such as congestion.

The Department of Broadband, Communications and the Digital Economy:

This department and the associated website clearly articulate the capacity of the National Broadband Network to deliver against the points listed in the letter inviting submissions dated 9th December, 2010.

An Australian Government Initiative | Queensland Government

When will the NBN be rolled out across the Moreton Bay Region?

The feedback through discussions to support the development of this submission clearly indicated that as a region we need to know when the NBN will be rolled out so that preparations can be made to raise awareness.

Further rounds of Release Sites:

Regional Development Australia Moreton Bay is interested in the timing of any future phases of release sites and the process for registering expressions of interest.

Technology Advancement:

Australia requires a broadband network to ensure its place as one of the worlds' advanced economic nations. This is regardless of the debate around fibre versus wireless or a combination of the two. The reality is that this infrastructure will be managing and delivering applications in 2-5 years+ time which are not currently available and on which business and residents will increasingly depend.

The debate is not over saving seconds on downloading 'Facebook' for example but should focus on the NBN being the enabling technology for a nation moving through and beyond the current technological revolution, in the same way water ways, railways and roads where developed during the industrial revolution. Who would have predicted the current uses and demands placed on the road and rail networks when construction commenced during the initial phases of the industrial revolution.

Broadband Today (www.broadbandtoday.com.au):

This is an initiative led by the Sunshine Coast Council (SCC) as part its **Digital Economy Plan**. There are many initiatives that can be implemented by local governments to drive uptake of the NBN and create the Economy of the 21st century. By preparing a site for many local governments to collaborate and communicate their local initiatives, SCC hope's to promote the development of locally developed intellectual property that can be shared and transferred to other localities to build a digital economy and using Broadband Today.

A number of Councils have been meeting and sharing knowledge on the NBN, Broadband and the Digital Economy since the announcement of the NBN. Some 34 local governments have been proactively identifying ways to ensure that their communities benefit from both the roll out of the NBN infrastructure, but equally the opportunity for their businesses and residents to access new markets and compete internationally in a way not previously possible. The 34 foundation Councils currently represent a population base of 4.5 million or 1 in 5 Australians.

Specific Comments:

The following is a summary of consultation outcomes and indicates in dot point format how the NBN will contribute towards the specific points covered by the 'New Inquiry into the National Broadband Network'.

The delivery of government services and programs:

- Improve the connectivity and reliability of on line communication with both government and non-government organisations
- Enhanced delivery of online services and programs, generating associated efficiencies
- Benefit communities in disaster events in terms of improved response times and associated government and emergency service response times.

Achieving health outcomes:

- Delivery of online consultations and services.

Improving the educational resources and training available for teachers and students:

It is my understanding that the NBN VET Sector committee has already captured the gains for the education and training sector as a result of the roll out of the NBN.

- Enhance the delivery of online courses and student resources
- Enhance educational and training delivery to rural and remote areas
- Provide significant flexibility of delivery so that individuals can learn at home at a time which fits with other aspects of their lives
- Video conferencing will also support virtual classrooms and online collaboration between students and teachers / lecturers
- Libraries and resource centres could also become on line resources
- It would support the development of a learning environment which is highly interactive and engaging. Improved opportunities for communication, interaction and collaboration will also aid the engagement of mature age learners
- Enhance the delivery of programs to broaden the opportunity for online learning making education and training more accessible to fit in with work and family life patterns and residential location
- Support the attainment of targets to increase retention rates at years 10 and 12
- Increase the numbers of Australian's participating in education and training, and obtaining degree level qualifications, including those from disadvantaged and indigenous communities
- The above will assist to increase participation and productivity rates within the economy.

The management of Australia's built and natural resources and environmental sustainability:

- The NBN will have a significant impact on the management of Australia's built and natural resources and environmental sustainability through the use of 'Smart' technology, and through the opportunities included in this submission. The NBN and technology as a whole provides the current generation with opportunities to significantly improve environmental sustainability, reduce waste and the use of natural resources, thereby reducing the nations carbon footprint.

Impacting regional economic growth and employment opportunities:

- Enhance economic growth by improving the connectivity and competitiveness of Australia's regions
- Provide opportunities for new and emerging business sectors providing jobs and developing skills for the future
- Employment opportunities will be enhanced by enabling residents to generate self employment opportunities and to work remotely regardless of location thereby accessing wider employment opportunities without the need to relocate
- New businesses could locate in regional areas and operate successful through the opportunity created by the NBN
- Telecommuting and more flexible working will be more accessible reducing the need and the cost of the daily commute. The benefits of telecommuting and the NBN have been identified by the Department of Broadband, Communications and the Digital Economy.

Impacting business efficiencies and revenues, particularly for small and medium business, and Australia's export market:

- The business benefits and opportunities provided by the NBN for business are clearly articulated on the following website www.digitalbusiness.gov.au developed by the Department of Broadband, Communication and the Digital Economy. This website also includes case studies
- The big challenge will be to measure productivity and economic gains generated by businesses which are using or move to using technology via the NBN. The second major challenge will be to work with business, especially small business to convert them to using applications and technology via the NBN. State Government Departments, Local Government, RDA's and Chambers of Commerce should be working together to build business and community awareness of the opportunities and benefits provided by the NBN
- Higher bandwidth, high speed communication and increased capacity will enable businesses to generate revenue savings through the use of technology
- The use of tele-conferencing for example will reduce export costs
- Open up new markets for Australian exporters and will enable more businesses to trade internationally online through the global market place. However, this also opens up new markets for overseas businesses in Australia

- Australian businesses could also lose business due to the ability of customers to buy overseas. Fluctuations in the value of the Australian $ against other currencies, and the current limits on the application of GST to online overseas purchases, will make online purchasing from overseas increasingly attractive, negatively impacting on Australia businesses.

Interaction with research and development and related innovation investments:

- R&D, innovation, collaboration and competitiveness will be aided significantly through the NBN infrastructure.

Facilitating community and social benefits:

- The benefits for the Not For Profit (NFP) sector will vary as they will for business and they will vary subject to the objectives of the organisation. Many NFP's rely on volunteers and may struggle to identify a resource to develop and manage an on line presence. Again www.digitalbusiness.gov.au has started to include content for NFP's
- NFP's rely more and more on informal and collaborative service delivery. On line collaboration and access to shared information will be highly beneficial to clients, promoting service efficiencies
- Increased productivity in serving the needs of the community
- A clear need to avoid socially disadvantaged residents and communities becoming further disconnected through the lack of access to the NBN through cost for example
- There will be positive social impacts in rural and isolated areas – reduce isolation and increase access to services required for a quality of life – health, education, and learning. It will also benefit social connection and communication for those in isolated areas. This will have a flow on to improved health, including mental health outcomes
- Young people are connected to technology and the ability to have faster and easier and wider use will benefit young people and their learning, social connection and employment options
- Social connection benefits through improved service and capability – improvement to what we are already seeing – virtual communities - unconstrained by time and geography
- The ability to connect quickly in emergency/disaster situations will be a major benefit in particular for isolated areas without adequate communications currently.

The optimal capacity and the technological requirements of a network to deliver these outcomes:

- Not qualified to provide a response.

Thank you for the opportunity to provide a submission and the Moreton Bay region is looking forward to the roll out of the NBN and in particular the opportunity for the region to be included in further release sites.

For further information in regard to this submission, please contact Andrew Quain, Executive Officer, RDA Moreton Bay by telephone on   or by email:

Yours sincerely

Neil Hoddinett
Chair
RDA Moreton Bay